Under the	: Paperwork Redu	ction Act of 1995, no persons are required t		Patent and Trade	emark Office.	U.S. DEPART		1-0032 MERCE
	UTILITY			Docket No.	2003-IP-011150U1			
ŀ	PATENT APPLICATION			First Inventor		Mohamed Y. Soliman		
TRANSMITTAL			Title		Methods for Geomechanical			
(Only for	new nonprovisior	nal applications under 37 CFR 1.53(b))	Express	Mail Label No.	ER27629	9452US		P.
See MPEP		TION ELEMENTS erning utility patent application contents.	ADDRE	ESS TO:	Commissi P.O. Box 1	Patent Applicationer for Patents 450 VA 22313-145	3	U.S.
2.	nit an original and cant claims small an original and cant claims small and cant claims and cant can be remoted a rangement of the low source to sequence to sequence computer program (ground of the low Summary of the Description of the Discharge of	[Total Pages 24 ] set forth below) invention elated Applications Fed sponsored R & D el listing, a table, listing appendix ention invention o Drawings (if filed)  ure  1. 113) [Total Sheets 14 ] [Total Sheets ] original or copy) application (37 CFR 1.63(d)) ivisional with Box 18 completed)  EINVENTOR(S) attached deleting inventor(s) application, see 37 CFR	8. Nucc (if ap a.   b.	Specificat  i. CD- ii. Pap  Statement  CCOMPAN'  Assignment P 37 CFR 3.73(in when there is English Trans Information Distatement (ID Preliminary Air Return Receipt (Should be sp Certified Copy (if foreign prio Nonpublication (b)(2)(B)(i). Ar or its equivale	ram (Appermino Acid in mino Acid in messary)  Readable ition Sequer ROM or Clier  ROM or Clier  Attack verifying YING AP  Papers (cove)  Statement  Statement  The control of the control	ndix) Sequence Su Form (CRF) Ince Listing on D-R (2 copies Identity of ab PLICATIO  er sheet & do nt ee) Imment (if appli 49  (MPEP 503) Emized) Document(s) ed) under 35 U.S. st attach form	bmission  : ); or  pove copies  N PARTS  cument(s)) Power of Attorney (cable) Copies of IDS Citations  .C. 122 PTO/SB/35	17497
18. If a CONTI	INUING APPLIC	CATION, check appropriate box, and s	upply the requ	isite information	s Mail Cert below and	ficate in the first se	entence of the	•
Continuity  Prior application in For CONTINUAT 5b, is considered	nuation information: ION OF DIVISION d a part of the di	or in an Application Data Sheet under	r 37 CFR 1.76: nuation-in-part (C	Art Unitation, from whic	or application it: h an oath or	declaration is	sunnlied unde	г Вох
	- 10	19. CORRESPO	NDENCE AL	DDRESS				
	ner Number:			OR C	Corres	pondence add	dress below	
Name Address	Robert A. Kent Halliburton End	···						
City	2600 S. 2nd Street			State OK Zip Code 73236				
Country			1 101	- JOK			73536-0440	
Name (Print/Ty		Kent		on No. (Attorney	/Agent le	Fax	580-251-3917	<del></del> -
Signature	pe) Rebert A.	Ven C	Negistratic	m No. (Allorney	/Agent) 2	8,626		

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



SU

Name (Print/Type)

Signature

PTO/SB/17 (01-03) Approved for use through 04/30/2003. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Telephone

		red to respond to a collection of information unless it displays a valid OMB  Complete if Known							
<b>&gt;</b>	\L	Ann	Application Number						
			Filing Date						
1		_			Mohamed Y. Solimar				
for FY 2003 Effective 01/01/2003. Patent fees are subject to annual revision			First	First Named Inventor Mohamed Y. So		Monamed 1. Solimar	i, et al		
Applicant claims small entity status. See 37 CFR 1.27			Exar	Examiner Name					
			Art L	Art Unit					
TOTA	L AMOUNT OF PAYMENT (\$) 932.00		Attor	ney D	ocket No.	2003-IP-011150U1			
MI	ETHOD OF PAYMENT (check all that apply)				FEE CA	LCULATION (continued)			
Che X Dep	e 3. ADDITIONAL FEES Large Entity   Small Entity								
Depos Accou			Fee Fee Fee Fee Description  Code (\$) Fee Fee Description						
Numb	er	1051	130	2051		arge - late filing fee or oath			
Depos Accour	nt	1052	50	2052	25 Surch: cover	arge - late provisional filing fee or sheet			
Name The Comm	nissioner is authorized to: (check all that apply)	1053	130	1053		nglish specification			
((=-)	fee(s) indicated below X Credit any overpayments		1			ng a request for ex parte reexaminati	on		
Charge	any additional fee(s) during the pendency of this application	1804	920*	1804		sting publication of SIR prior to ner action			
· —	fee(s) indicated below, except for the filling fee a-identified deposit account.	1805	1,840*	1805 1	Reque *840.	sting publication of SIR after			
to the accid	FEE CALCULATION	1251	110	2251	55 Extens	ion for reply within first month			
1. BASIC	FILING FEE	1252	410	2252	205 Extens	ion for reply within second month			
Large Entity	Small Entity	1253	1	2253	465 Extens	ion for reply within third month			
Fee Fee Code (\$)	Fee Fee Fee Description Fee Paid Code (\$)	1254 1	1,450	2254	725 Extensi	ion for reply within fourth month			
1001 750	2001 375 Utility filing fee 770	1255 1		2255		on for reply within fifth month			
1002 330	2002 165 Design filing fee	1401	- 1	2401	160 Notice	• •	<b>—</b>		
1003 520	2003 260 Plant filing fee	1402		2402 2403		brief in support of an appeal	<b> </b>		
1004 750	2004 375 Reissue filing fee	1403 1451 1.	- 1		· ·	t for oral hearing	<b></b>		
1005 160				451 J 2452		to institute a public use proceeding to revive - unavoidable	<b>  </b>		
·	SUBTUTAL (1) [(\$) 770.00	1453 1,				to revive - unintentional			
2. EXTRA	CLAIM FEES FOR LITH ITY AND REISSUEL	1501 1,	- 1			sue fee (or reissue)			
	Ext <u>ra Claims below Fee Paid</u>	1502	470 2	502	235 Design is	ssue fee			
Total Claims Independent	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1503 6	630 2	503	315 Plant iss	ue fee			
Claims Multiple Depe		1460 1	130 1	460		to the Commissioner			
•	1	1807	50 1	807		ng fee under 37 CFR 1.17(q)			
Fee Fee	Small Entity   1   Fee Fee Fee Description	806 1	180 1	806 1		on of Information Disclosure Stmt			
Code (\$)	Code (\$)	1021	40 8	1021	40 Recording	g each patent assignment per (times number of properties)			
1202 18		809 7	50 2	809 3	375 Filing a si	ubmission after final rejection			
1201 84	2201 42 Independent claims in excess of 3 2203 140 Multiple dependent claim, if not paid	040 -	_	040 -	•	1.129(a))			
1203 280 1204 84	2203 140 Multiple dependent claim, if not paid 1, 2204 42 ** Reissue independent claims	810 7	50 2	810 3		additional invention to be (37 CFR 1.129(b))			
		801 7	50 28	01 3	75 Request	for Continued Examination (RCE)			
1205 18	2205 9 ** Reissue claims in excess of 20 19 and over original patent	802 9	00 18	02 9		for expedited examination in application			
	SUBTOTAL (2) (\$) 162,00	ther fee	(specify	)					
**or_number	SUBTOTAL (2) (\$\\$) 162.00   previously paid, if greater, For Reissues, see above	Reduced	by Basi	ic Filing	Fee Paid	SUBTOTAL (3) (\$) 0			
UBMITTED B	Y					(Complete (if applicable)			
me (Print/Ivos		Regis	tration I	Vo.		Talanhana			

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

(Attorney/Agent)

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of lime you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Mohamed Y. Soliman, et al

Application No.: / Unknown

Filed: Concurrently Herewith Examiner: Unknown

For: Methods for Geomechanical Fracture Modeling

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

errorgen hat bed

## **EXPRESS MAIL CERTIFICATE**

"Express Ma	ail" label number	ER276299452US	
Date of Dep	osit	4-2003	

I hereby state that the following attached paper or fee

Specification with 24 Pages Fourteen sheets of drawings Information Disclosure Statement with PTO-1449 & References Declaration (unsigned)

Fee Transmittal
Patent Application Transmittal
Return Postcard

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10, on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Tammy Knight
Typed or printed name of person mailing paper or fee

Signature of person mailing paper or fee

NOTE: The label number need not be placed on each page. It should, however, be placed on the first page of each separate document, such as, a new application, amendment, assignment, and transmittal letter for a fee, along with the certificate of mailing by "Express Mail." Although the label number may be on checks, such a practice is not required. In order not to deface formal drawings it is suggested that the label number be placed on the back of each formal drawing or the drawings be accompanied by a set of informal drawings on which the label number is placed.